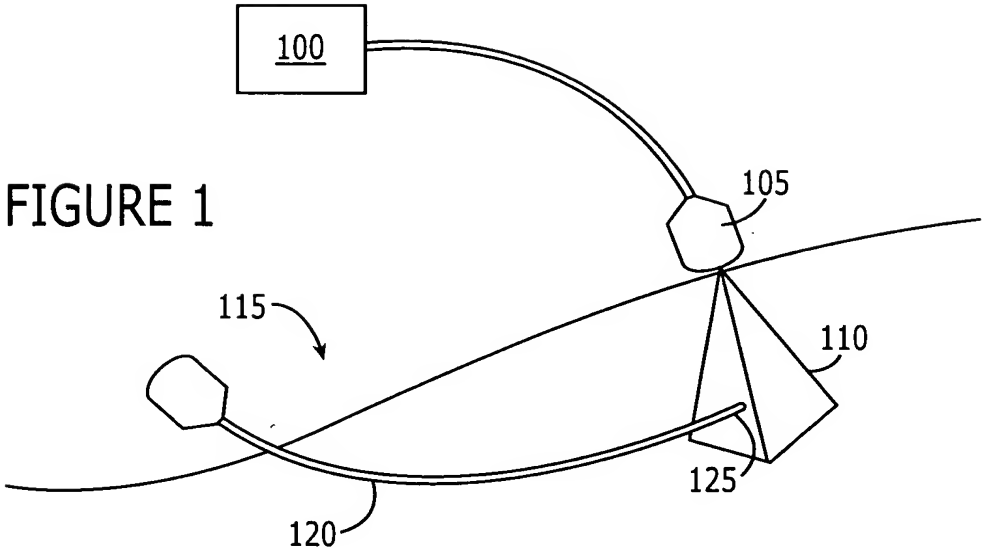

FIGURE 1

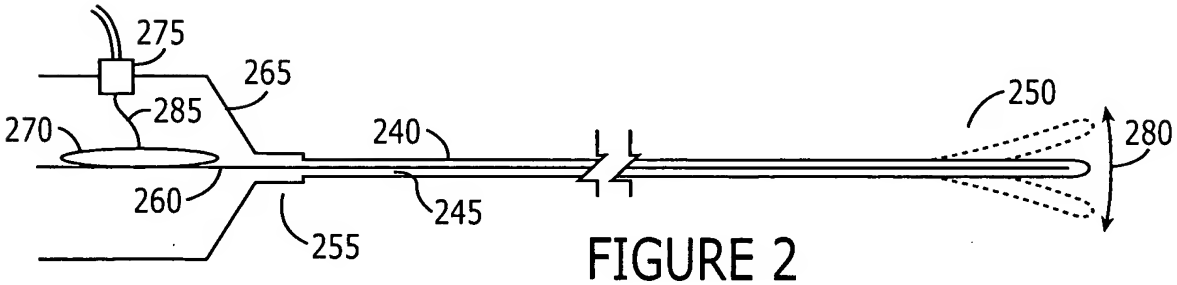

FIGURE 2

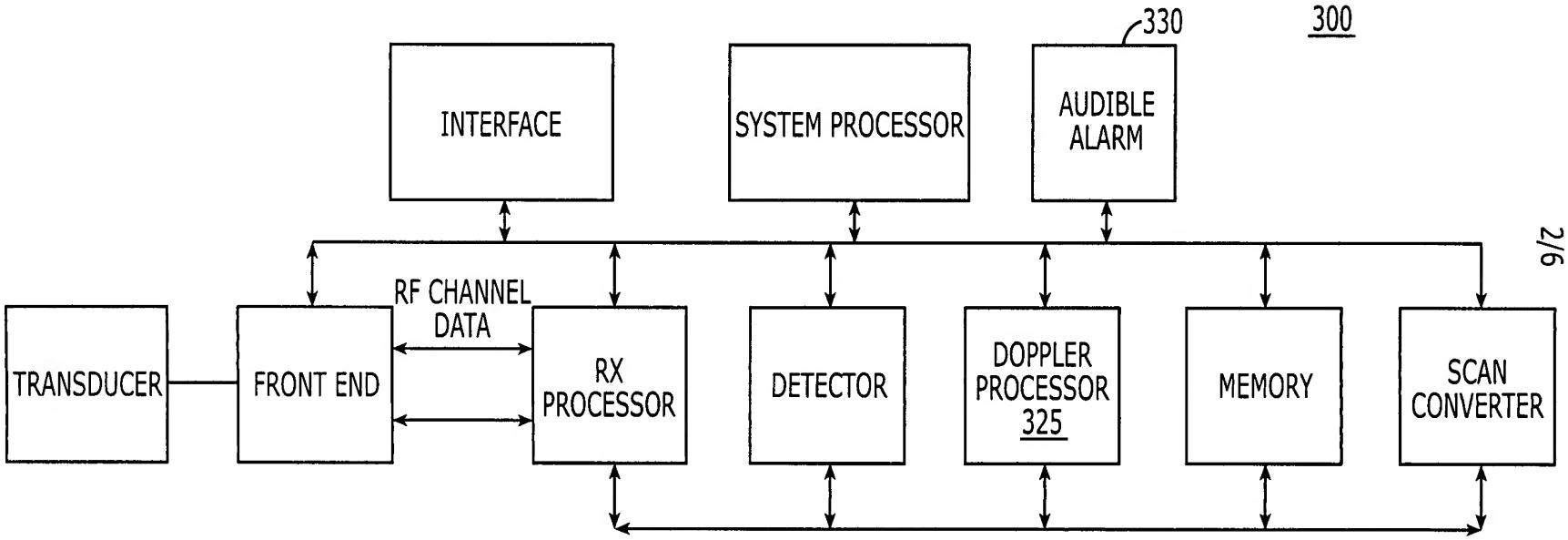
300
330
INTERFACE
SYSTEM PROCESSOR
AUDIBLE ALARM
2/6
RF CHANNEL DATA
TRANSDUCER
FRONT END
RX PROCESSOR
DETECTOR
DOPPLER PROCESSOR 325
MEMORY
SCAN CONVERTER

FIGURE 3

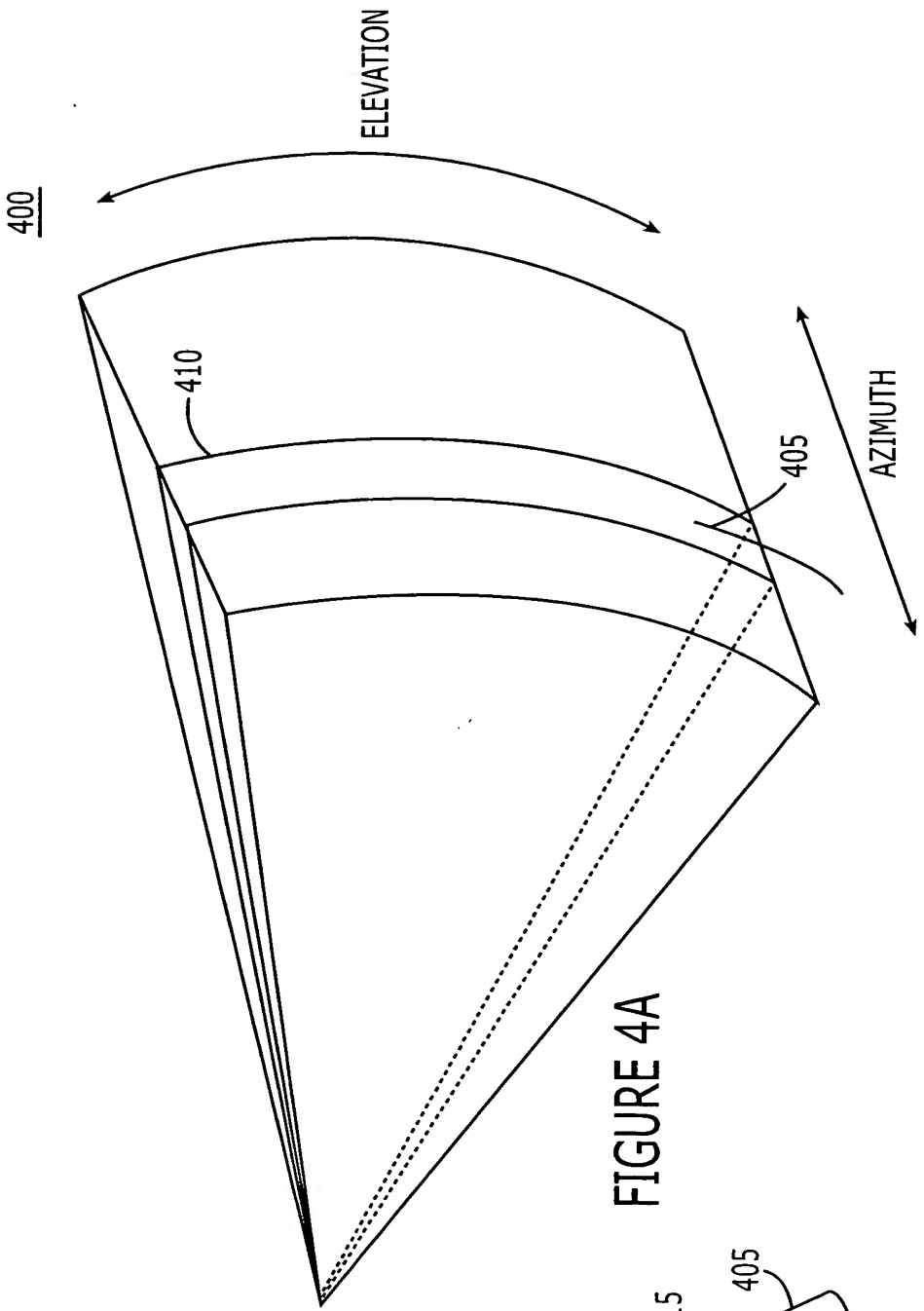

FIGURE 4A

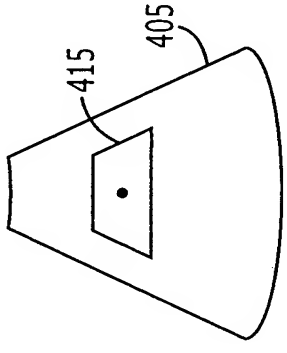

FIGURE 4B

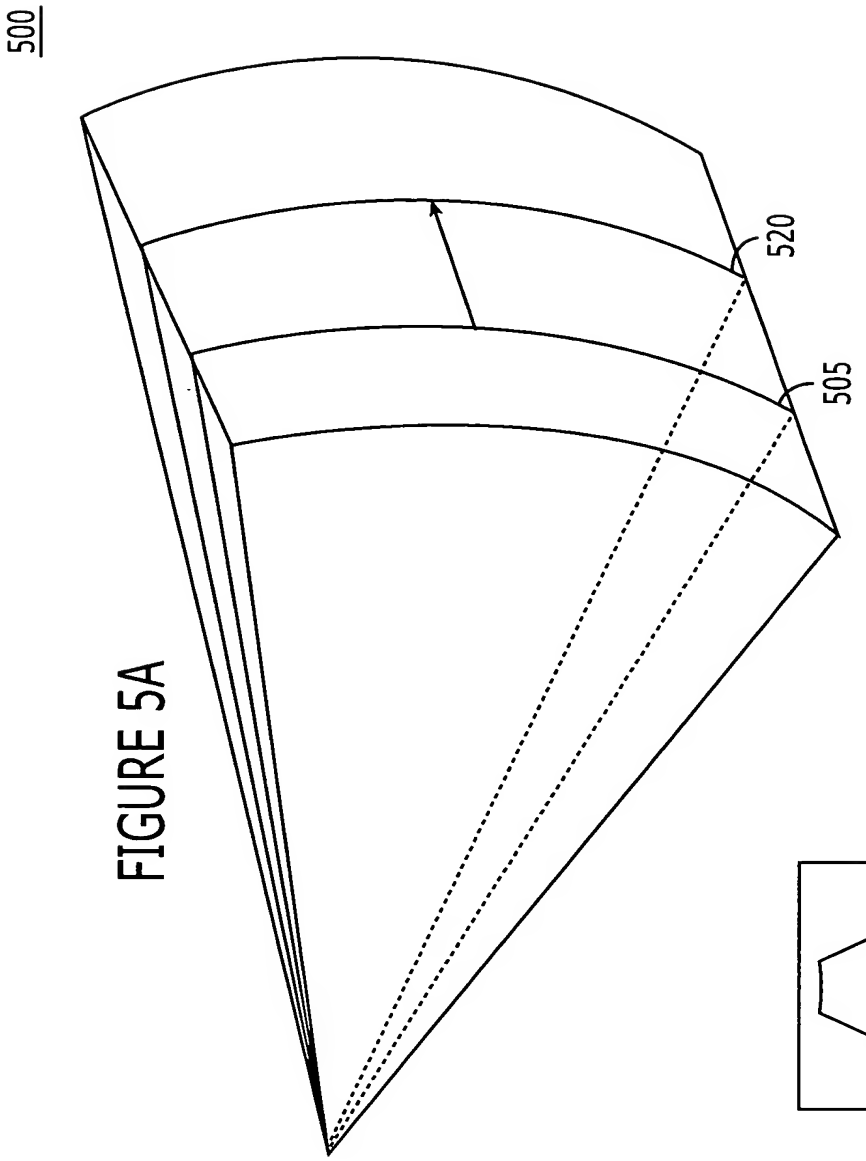

FIGURE 5A

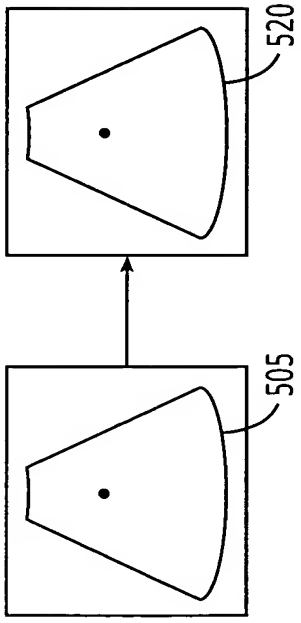

FIGURE 5B FIGURE 5C

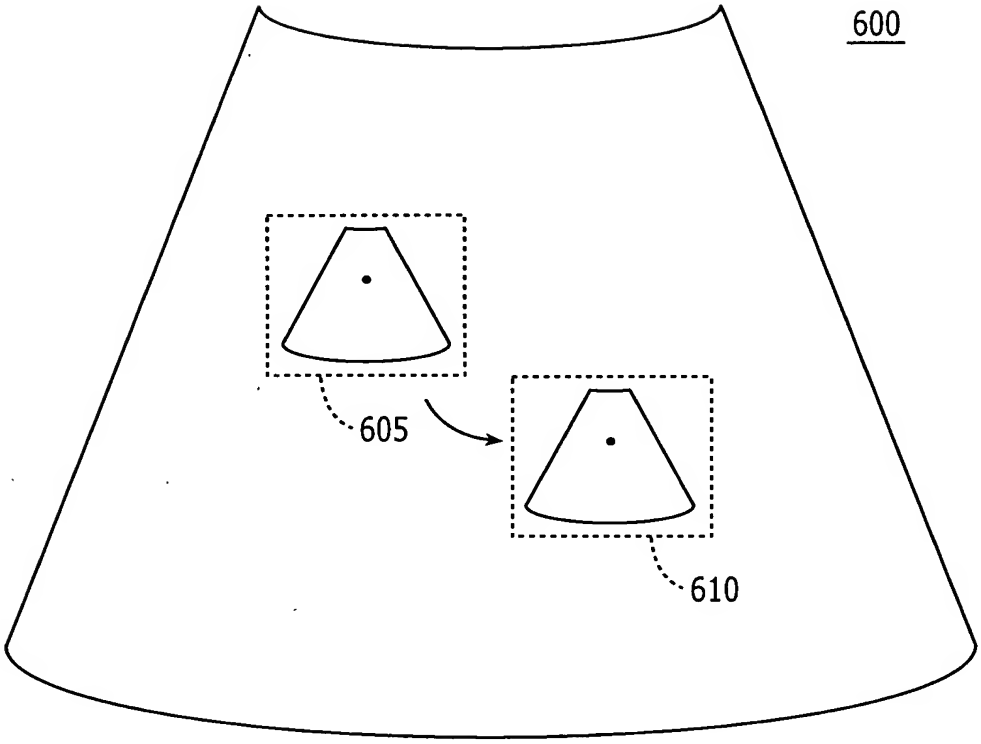

FIGURE 6

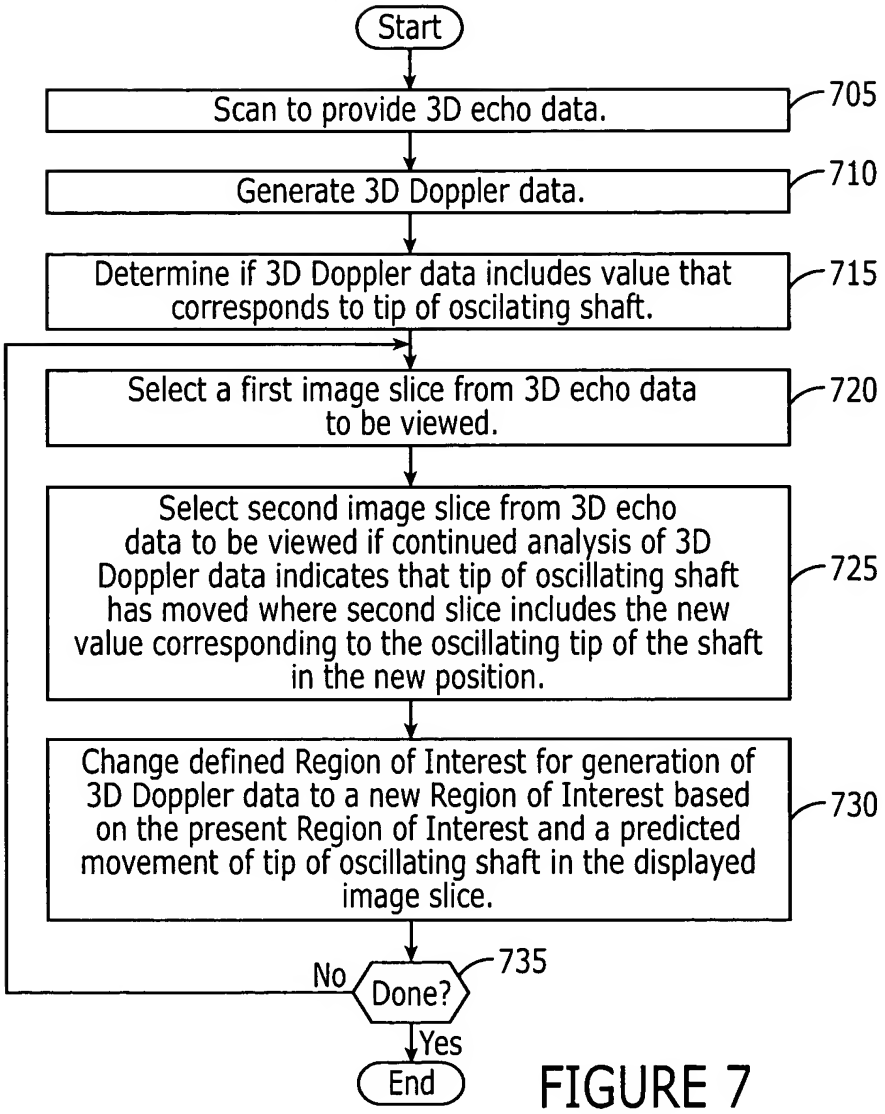
Start
Scan to provide 3D echo data.
705
Generate 3D Doppler data.
710
Determine if 3D Doppler data includes value that corresponds to tip of oscilating shaft.
715
Select a first image slice from 3D echo data to be viewed.
720
Select second image slice from 3D echo data to be viewed if continued analysis of 3D Doppler data indicates that tip of oscillating shaft has moved where second slice includes the new value corresponding to the oscillating tip of the shaft in the new position.
725
Change defined Region of Interest for generation of 3D Doppler data to a new Region of Interest based on the present Region of Interest and a predicted movement of tip of oscillating shaft in the displayed image slice.
730
No
Done?
735
Yes
End

FIGURE 7